

Construction Fire Safety in The City of Berkeley

Local Fire Ordinance- The City of Berkeley adopts the International Fire Code as amended by the State of California, plus local municipal amendments. The fire code adoption and amendments are published as **Chapter 19.48 of the Berkeley Municipal Code (BMC)**. The full text of the local amendments is available online at: <http://codepublishing.com/ca/berkeley/>

Fire Department Permits and Review of Planning and Building Proposals. The City of Berkeley operates a full service **Permit Service Center**. A full time fire department representative is located at that facility. All fire department permits are processed through that organization. Any planning or building related proposals which require fire department review and approval are routed by the PSC staff. Limited over-the-counter review and approval of fire permits is available. You may contact the Permit Service Center to contact or schedule appointments with the fire department's Fire and Life Safety Plans Examiner.

Requests for Construction Inspections. Permit and construction inspection requests must be made directly with a fire prevention inspector in the Fire Prevention Division of the Fire Department. The Building Department's inspection hotline is **not** forwarded to the fire department.

Construction Related Contacts

Berkeley Fire Department

2100 Martin Luther King Jr. Wy.
Berkeley, CA 94704
510 981-3473 (Fire Administration)
510 981-5585 (Fire Prevention)
email:fire@cityofberkeley.info

City of Berkeley Permit Service Center

2120 Milvia St. (at Center St.)
Berkeley, CA 94704
(510) 981-7500
email:planning@cityofberkeley.info

Owner's/Contractor's Responsibility

- A designated **Fire Safety Superintendant** shall be appointed with full authority to set and enforce fire safety policies.
- The Fire Safety Superintendant will develop a **pre-fire/pre-incident plan** including
 - 1) a simplified site and floor plan showing emergency access and egress to the project
 - 2) procedures for reporting an emergency
 - 3) emergency assembly points and accountability procedures.
 - 4) the location and use of any/all fire protection equipment at the site.
 - 5) the plan will be communicated to all contractors and consultants working on the site.
- The Fire Safety Superintendant is responsible for maintaining and replacing as necessary all fire safety signage and equipment required by this standard and the fire code
- The Fire Safety Superintendant is responsible for supervising any hot work permit system
- The Fire Safety Superintendant is responsible for coordinating, monitoring and tracking all fire protection system impairments required during the course of work.

General Precautions

- **Smoking** permitted only in designated areas with approved ashtrays. All other areas must be posted "No Smoking"
- **Hot Work** including cutting/welding in accordance with fire code Ch. 26.

- **Combustible waste** must be removed from buildings at end of shift and stored in approved waste containers or removed from site.
- **Self heating materials**, waste, and equipment must be stored in listed metal waste containers only
- **Temporary electrical wiring** requires a building dept. permit
- **Fire watch** may be required for demolition or hot work.

Flammable / Combustible Liquids and Gases

- **Storage** is allowed in original DOT approved shipping containers **or** in listed flammable liquid storage cabinets only (if indoors), or in an approved location outdoors.
- **Combustible waste** and vegetation is prohibited in storage areas.
- **Ignition sources** such as smoking and hot work are not be allowed in storage areas and must be posted.
- **Temporary tanks** require separate fire department permit
- **Gas cylinders** secured in an upright position and protected from damage. Spare cylinders must have valve protective caps in place. All cylinders must be marked by the supplier.
- **Liquefied propane** and similar liquefied or cryogenic fuel gases shall not be stored, dispensed or handled in areas where a gas leak could accumulate
- **Fire extinguishers-** a minimum of one 4A:20BC near each storage area.

Temporary Heating Equipment.

- **Equipment** must be listed and labeled per Mechanical Code
- **Clearance** from combustibles per manufacturer's requirements
- **Mounted/fixed** in place and protected from damage
- **Supervised** and maintained by a competent person

Portable Fire Extinguishers

- **A minimum of one fire extinguisher is required** on each construction site. The minimum allowable size is a "2A:10BC" sized unit. *See the section on "Flammable / Combustible Liquids and Gases" for additional requirements.*
- **Valid inspection/maintenance tags** are required on all fire extinguishers on commercial construction projects. The tag must be issued by a firm licensed to inspect and service fire extinguishers in the State of California.
- **Additional extinguishers** are required at each stairway on every floor level containing combustible materials, and at least one fire extinguisher is required in each portable building or trailer, storage shed and storage or shipping box that is large enough to enter.

Motorized Equipment

- Exhaust must not discharge against combustible materials
- Exhaust must be piped to the outside of the building
- Motors must be stopped during fueling

Fire Department Features

- **Firefighting water supply** around and on the project site must be established prior to site improvements and shall be maintained throughout the duration of the project.
- **Fire department access for firefighting** and other emergency operations is required to be established at the site prior to the start of and throughout the duration of the project. This may include the construction of temporary or permanent fire roads.
- **Fire department access key boxes** may be required when necessary to enhance site access.
- **The project street address** shall be displayed prominently on the primary street frontage in lettering no smaller than six inches high on a contrasting background.
- **Temporary or permanent exit stairs.** For new buildings (or existing buildings under renovation) 50' or greater in height or four or more stories tall a minimum of one temporary or permanent illuminated stairwell shall be maintained at all times.
- **Signage for stairs.** All stairs shall be provided with temporary floor identification signs at each floor landing essentially equivalent to that required by fire code section 1022.8 with the following exceptions
 - 1) the designation of the stair shall include its status as temporary or permanent.
 - 2) minimum size may be 8.5"x11"
 - 3) signage shall be weather resistant or enclosed in a weather resistant covering such as lamination or vinyl sheet protectors (note that the background and lettering are required to be non-glare)
 - 4) the building levels served by the stair must be changed as necessary to reflect work or conditions which would interfere with the use of the stair, or create unsafe conditions such as pouring of concrete or missing guardrails.
- **Standpipes** in buildings required to be equipped with standpipe systems shall:
 - 1) be provided with at least one working temporary or permanent standpipe before the building exceeds a height of 40 feet
 - 2) be extended floor-by-floor as the height of the building increases. At no time will the top hose outlet be lower than the floor immediately below the highest level with secured decking or flooring.
 - 3) provide accessible hose connections at usable stairs
 - 4) be provided with a Fire Department Connection (FDC) for standpipes that consists of one 2"x2.5" wye fitting and a 5" diameter storz style fire hose connection, with appropriate check valves.
 - 5) have the FDC terminated and adequately supported outside all construction fencing, but shall not project into a sidewalk path of travel or the public right-of-way without obtaining an appropriate encroachment permit from a City of Berkeley Public Works Inspector.
 - 6) have the FDC location marked with a durable sign, sized no smaller than 1'h x 2'w, having a white background, red border and red lettering 9" high w/ ½" stroke with the legend "FDC". Signs with equivalent or better visibility may be approved by a fire inspector.
 - 7) have all active hose outlets marked with a durable sign reading "FDC", on a minimum 8.5"x11" size with white background, a red border and red lettering..
- **Standpipes in buildings under demolition.** Standpipes must be maintained in an operable condition during demolition for use by the fire department. Demolition of standpipes may proceed with the building but should not be demolished further than one level below the level of demolition.
- **Fire Sprinklers** in buildings under renovation must remain active in all areas not directly affected by the actual fire sprinkler work being performed.
 - 1) Whenever possible unaffected portions of the system shall be isolated from sections under construction by the use of blind flanges or the capping of piping.
 - 2) If control valves are used to isolate sections of pipe the water supply must be reestablished during periods when work is not being performed, such as after work hours.
 - 3) It is the responsibility of the project Fire Safety Superintendent to coordinate, monitor and track fire system impairments.
 - 4) signage notifying occupants and workers of the sprinkler impairment must be posted at the exterior and interior access points in all portions of a building effected by a construction related sprinkler impairment. An identical sign must be posted at the FDC. The signs must also advise occupants to call "911" in case of fire.

